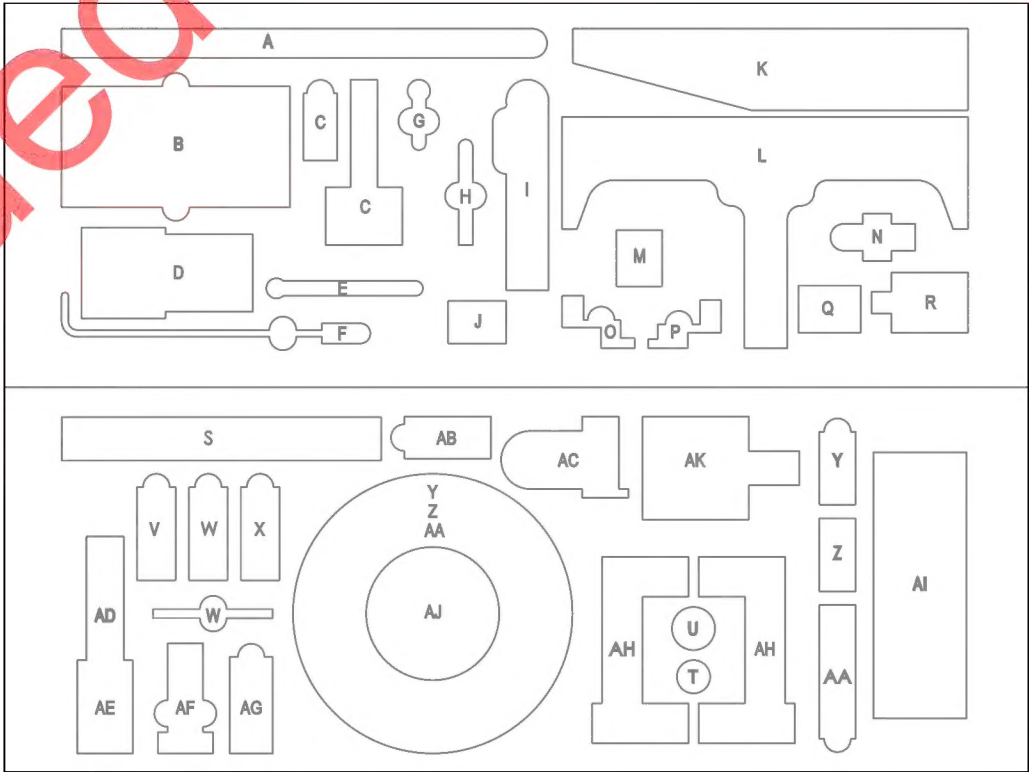


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-75 ADDED CUTOUTS FOR RBT112800 & RBT18560.CH'D TOOL LOCATIONS FOR RBGTMD-12, RB6796941-14, RBT18506 & RBT18540 TO MAKE ROOM FOR NEW TOOLS, ADDED SLOT FOR SPANNER WRENCH FOR RBSC7028-P, CH'D CUTOUT RB6796941-201 & RB6796941-203, -77 ADJUSTED CUTOUT FOR RBT18560 & RBT18546 FOR BETTER FIT, -81 CH'D TO REFLECT NEW TOOLS ADDED AJ & AK.	2/29/2012	RJC	DW
2		-75 CH'D TOOL LAYOUT, ADDED CUTOUTS FOR NEW DESIGN DRAIN HOSES & INDIVIDUAL QUILLS, CH'D CUTOUT SIZE FROM 6.00 TO 3.50 & DEPTH FROM 2.50 TO 2.60 FOR RBBP1425-101 TO MAKE ROOM FOR QUILL CINTAINERS.	1/10/2013	RJC	SE
3		-77 CH'D CUTOUT FOR -7.	2/7/2013	RJC	SE
4		-75 ADDED MISSING CUTOUT DEPTH 1.36.	6/12/2013	BIM	RW
5	15-0334	DELETED PART # FROM BOM AND ADDED LOCATION COLUMN FOR TOOLS THAT GO INTO KIT, -25, -39, -57, & -67 ADDED REFERENCE VENDOR AND PART# INFO, -77 CORRECTED NOTE 3 WAS 1/2in, WIDE IS 1in, WIDE, DELETED NOTE 2, -81 CORRECTED RB23006783 TOOL DESCRIPTION WAS ADAPTER TURBUNE NUT, LOWER IS UPPER, UPDATED CONTACT INFO TO DART, AEROSPACE, -83 CH'D PART # WAS CARR LANE #CL-4-F IS MCMaster-CARR #3896T31, -85 WAS MCMaster-CARR #90312A290 IS CARR LANE #CL-2-C, -89 WAS RED BARN PLACARD IS DART PLACARD RB41011, ADDED -95 GROMMET.	10/13/2015	RJC	JAG

SEE ATTACHED DEVIATION

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	Loc.	B/O INFORMATION OR SPECIFICATIONS	PG.
				1	SEAT FRAME SUPPORTS		A	RBT18538	1
				1	POWER TURBINE CLEANING KIT		B	RB2300COMB	1
				1	T/R DRIVE SHAFT BEARING LUBRICATION TOOL		C	RBPA003	1
				1	SCALE TESTER		D	RBE-RDGS-15	1
		B/O	-9	1	MAIN ROTOR PILLOW BLOCK NUT WRENCH		E	5/16in. 12pt. COMBINATION WRENCH (SNAP-ON GOEX10B)	1
				1	FUEL CONTROL WRENCH		F	RB6798292-B	1
				1	K-FLEX WRENCH		G	RBT18546	1
				1	ENGINE BELL MOUTH RATCHET		H	RBT18565	1
				1	FUEL NOZZLE WRENCH		I	RB23007638	1
				1	OIL SUMP STRAIGHTENER		J	RBT18524	1
				1	MAIN ROTOR TRIM TAB PROTRACTOR		K	RBT400203	1
				1	MAIN ROTOR TRIM TAB BENDER		L	RBT400202	1
		B/O	-25	1	CROWSFOOT INB. HYD. FILTER		M	3/8 dr. X 1in. PROTO #BCF-32 (MSC #06180863)	1
				1	TRUNNION SPREADER		N	RB2200078	1
				1	ADAPTER TURBINE NUT, LOWER		O	RB23006782	1
				1	ADAPTER TURBINE NUT, UPPER		P	RB23006783	1
				1	SWASH PLATE SHIM BOLTS		Q	RBT18551	1
		B/O	-35	1	SAFETY PIN (TO BE USED W/Q)		Q	Ø3/64 WIRE (MCMaster-CARR #90319A110)	1
				1	TAIL ROTOR CROSS HEAD PULLER		R	RBT18505	1
		B/O	-39	2	MAIN ROTOR SLING ASSY.		S	.07 X 1 X 48 OLYMPIC SYNTHETIC PRODUCTS #EE-1101 (EUGENE EQUIP.)	1
				1	M/R PILLOW BLOCK BOLT SOCKET		T	RBGTMD12	1
				1	STARTER SEAL GUIDE		U	RB6796941-14	1
				1	BEARING INSTALL & REMOVE		V	RBIR7028	1
				1	SWASH PLATE PITCH HORN BEARING CUTTER		W	RBSC7028-P	1
				1	SWASH PLATE PITCH HORN BEARING SWAGING TOOL		X	RBST2812-P	1
				1	TRANSMISSION DRAIN TOOL		Y	RB DB3188L	1
				1	T/R GEARBOX & FREE WHEELING UNIT DRAIN		Z	RB DB3225L FOR L1 & L3, (or RB H47132 FOR L4 & 407)	1
				1	FREE WHEELING CLUTCH DRAIN TOOL		AA	RB DB3225C	1
				1	M/R MAST NUT SOCKET		AB	RBT18506	1
				1	HELICOPTER LIFTING EYE		AC	RBT18540	1
				1	STARTER PULLER ASSY.		AD	RB6796941-201	1
				1	SLIDE HAMMER ASSY.		AE	RB6796941-203	1
				1	STARTER SEAL INSTALLER		AF	RB6796941-18	1
		B/O	-67	1	BLADE BOLT LATCH SOCKET		AG	1/2dr. 1-1/16 12pt. DEEP SOCKET PROTO #J334 (MSC #85035798)	1
				2	MAIN ROTOR RESTRAINT TOOL		AH	RBT18666	1
				1	INPUT DRIVE SHAFT TOOL KIT		AI	RBBP1425-101	1
		B/O	-73	1	CASE	PLASTIC		PELICAN #APP-1700-E	N/S
		B/O	-75	1	BOTTOM TOOL CUSHION	Y-20 BLACK		3 X 13-5/8 X 35-5/8 I.R. SPECIALTIY	2
		B/O	-77	1	TOP TOOL CUSHION	Y-20 BLACK		2-1/16 X 13-5/8 X 35-5/8 I.R. SPECIALTY	3
		B/O	-79	1	TOP CUSHION STIFFENER	COROPLAST, BLACK		6mm X 13-5/8 X 35-5/8 I.R. SPECIALTY	4
		B/O	-81	1	CONTENTS & LOCATION CARD	LAMINATED CARD		1/64 X 6 X 8	5
		B/O	-83	2	FERRULE	ALUMINUM		Ø1/16 X 3/8 (MCMaster-CARR #3896T31)	N/S
		B/O	-85	1	LANYARD CABLE	STEEL, COATED		1/16 X 12 (7X7) (CARR LANE #CL-2-C)	N/S
		B/O		1	DART PLACARD	ALUMINUM		#RB41011	N/S
				1	PTO SEAL INSTALL TOOL		AJ	RBT112800	1
				1	SEAL PULLER ENGINE BEARBOX		AK	RBT18560	1
		B/O	-95	1	GROMMET	NICKEL-PLATED BRASS		SIZE Ø0, Ø.42 OD (MCMaster-CARR #86625K31)	N/S

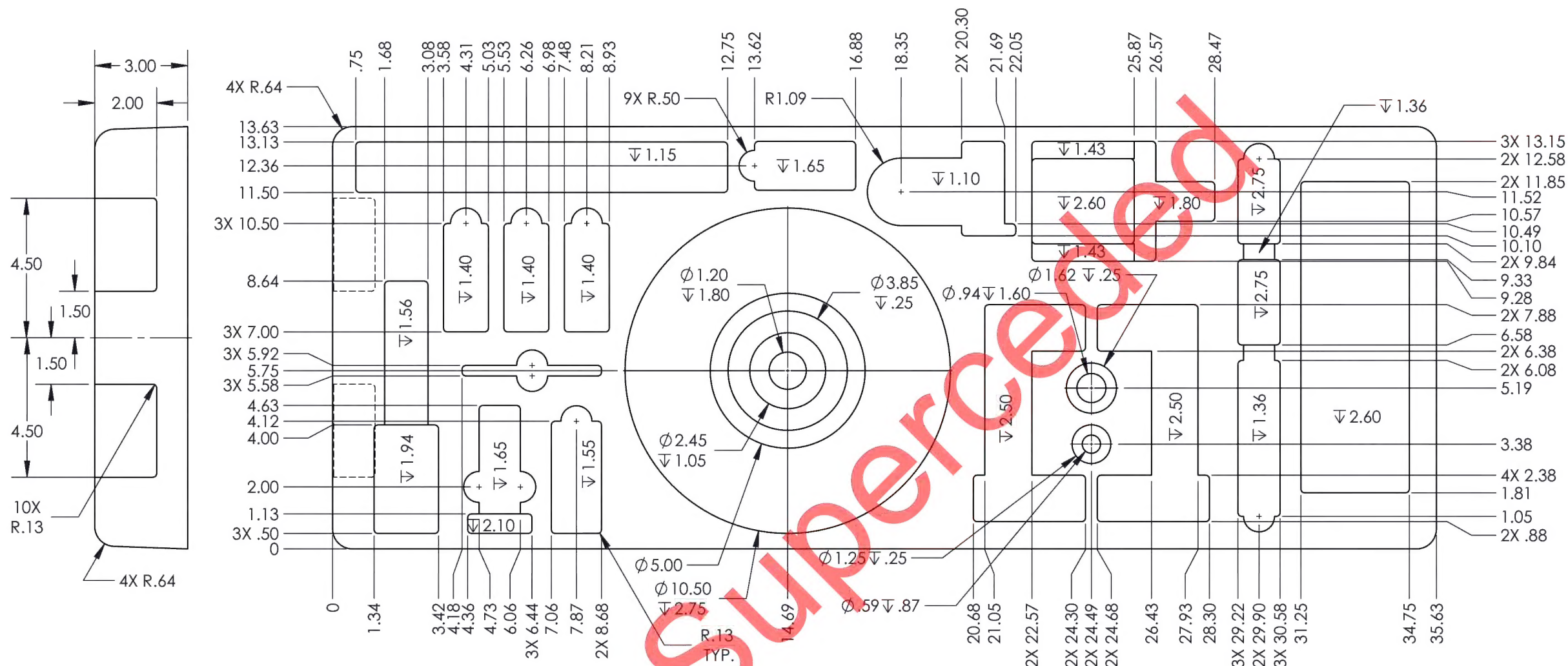


UNDER REVIEW

URF 19-544 19.01.31 (MB)

TITLE LONG RANGER FIELD MAINTENANCE KIT			
DWG NO. RBT18543			REV 5
MAT'L HEAT TREAT FINISH SPEC		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125°✓	
DRAWN BY: CLOUGH		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
CHECKED:		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
OPPS APPR:		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
QA APPR:		USED ON MODEL	
APPROVED: D Weil		206L	
SCALE 1:3	DATE 8/17/2011	SHEET 1 OF 5	

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-75 ADDED CUTOUTS FOR RBT112800 & RBT18560, CH'D TOOL LOCATIONS FOR RBGTMD-12, RB6796941-14, RBT18506 & RBT18540 TO MAKE ROOM FOR NEW TOOLS, ADDED SLOT FOR SPANNER WRENCH FOR RBSC7028-P, CH'D CUTOUT RB6796941-201 & RB6796941-203.	2/29/2012	RJC	DW
2		-75 CH'D TOOL LAYOUT, ADDED CUTOUTS FOR NEW DESIGN DRAIN HOSES & INDIVIDUAL QUILLS, CH'D CUTOUT SIZE FROM 6.00 TO 3.50 & DEPTH FROM 2.50 TO 2.60 FOR RBBP1425-101 TO MAKE ROOM FOR QUILL CONTAINERS.	1/10/2013	RJC	SE
4		-75 ADDED MISSING CUTOUT DEPTH 1.36.	6/12/2013	BIM	RW




UNDER REVIEW
URF 19-544 19.01.31 (MB)

NOTE:
1. SOME HIDDEN LINES REMOVED FOR CLARITY.



BOTTOM TOOL CUSHION

			
TITLE			
LONG RANGER FIELD MAINTENANCE KIT			
DWG NO.		REV	
RBT18543-75		5	
MAT'L Y-20 BLACK		UNLESS OTHERWISE SPECIFIED	
REAT		DIMENSIONS ARE IN INCHES	
TREAT		.XXX ± .005 FRACTIONS ± 1/8	
FINISH		.XX ± .01 ANGLES ± 5°	
SPEC		.X ± .1 SURFACES = 125/√	
DRAWN BY:		1. BREAK ALL SHARP EDGES	
CLOUGH		.015 x 45° OR .015R	
CHECKED:		2. DIMENSIONAL LIMITS APPLY	
OPPS APPR:		AFTER PLATING	
QA APPR:		3. INTERPRET DIM AND TOL PER	
APPROVED:		ASME Y14.5M-2009	
D Weil		USED ON MODEL	
SCALE		206L	
1:4	DATE	8/17/2011	
		SHEET 2 OF 5	

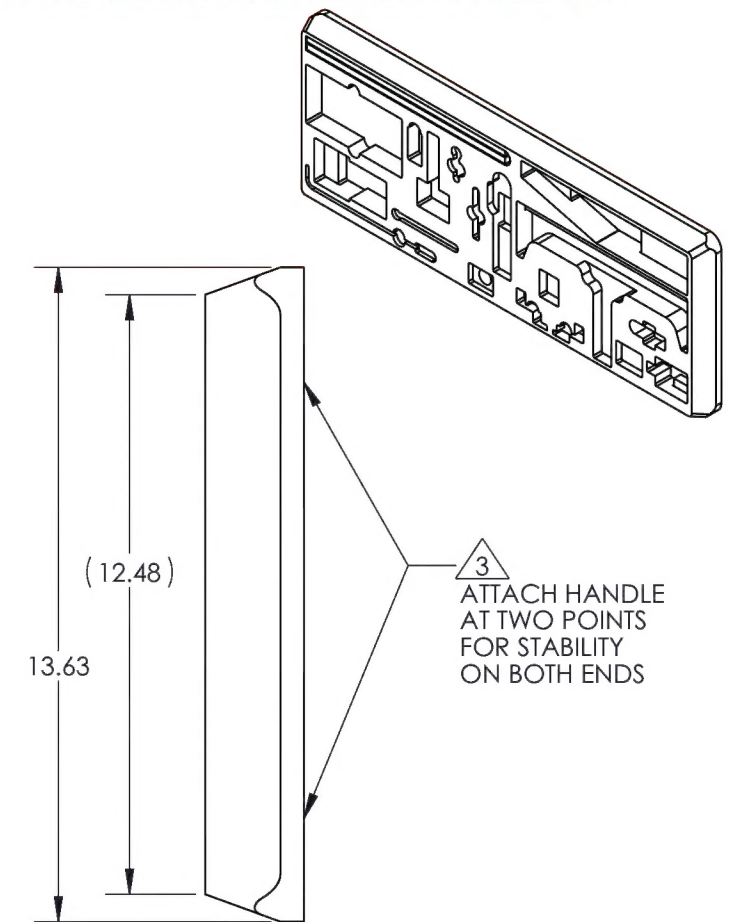
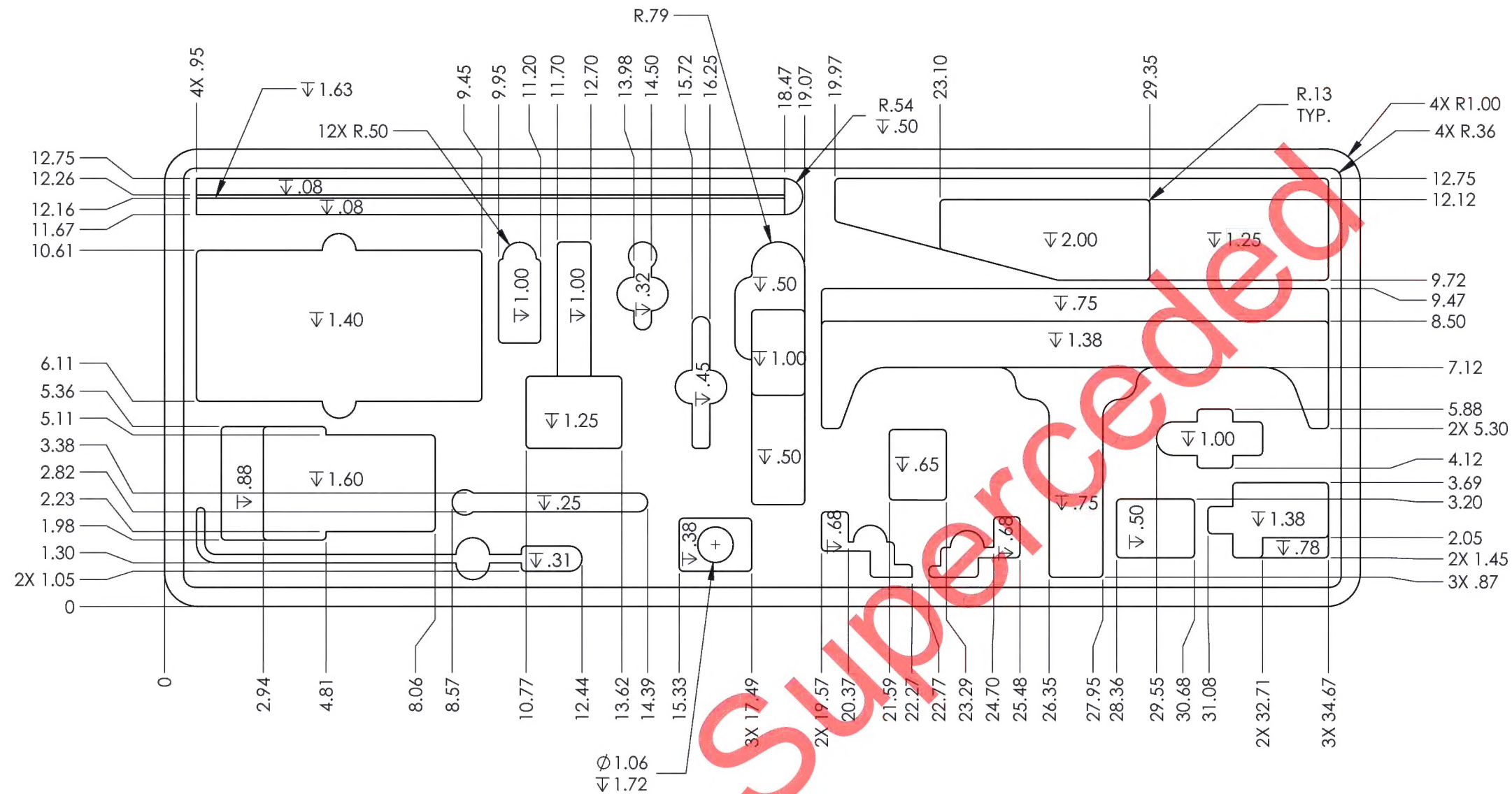
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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
1		-77 ADJUSTED CUTOUT FOR RBT18560 & RBT18546 FOR BETTER FIT.	2/29/2012	RJC
3		-77 CH'D CUTOUT FOR -7.	2/7/2013	RJC
5	15-0334	-77 CORRECTED NOTE 3 WAS 1/2in. WIDE IS 1in. WIDE, DELETED NOTE 2.	10/13/2015	RJC

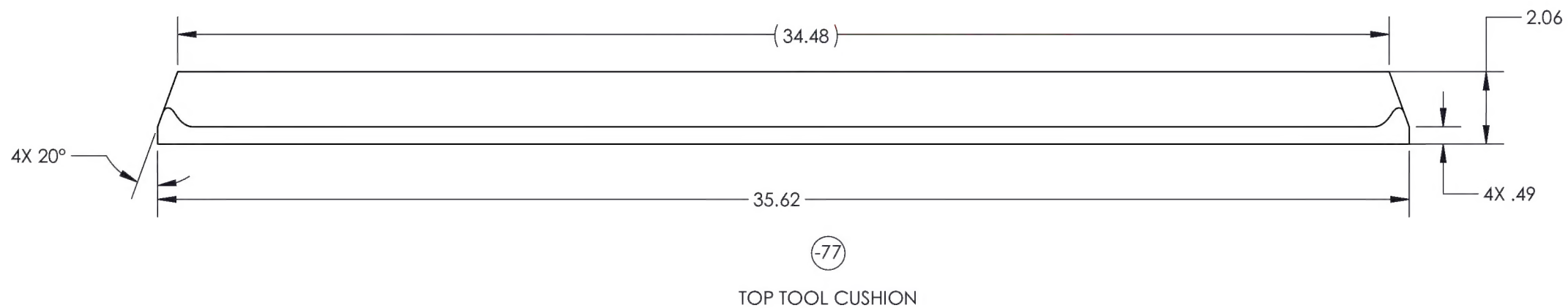
APPROVED
DW
SE
JAG

UNDER REVIEW
URF 19-544 19.01.31 (MB)

SEE ATTACHED DEVIATION



- NOTES:
- HIDDEN LINES REMOVED FOR CLARITY.
 - VENDOR TO ATTACH A 1in. WIDE BLACK RIBBON LIFTING HANDLE TO EACH END OF COROPLAST, LOOP TO BE LARGE ENOUGH TO ACCOMMODATE LARGE HANDS AND FOLD ON TOP OF FOAM FOR STORAGE, -77 TO BE ATTACHED TO -79.
 - USE DXF PROFILE TO MANUFACTURE.

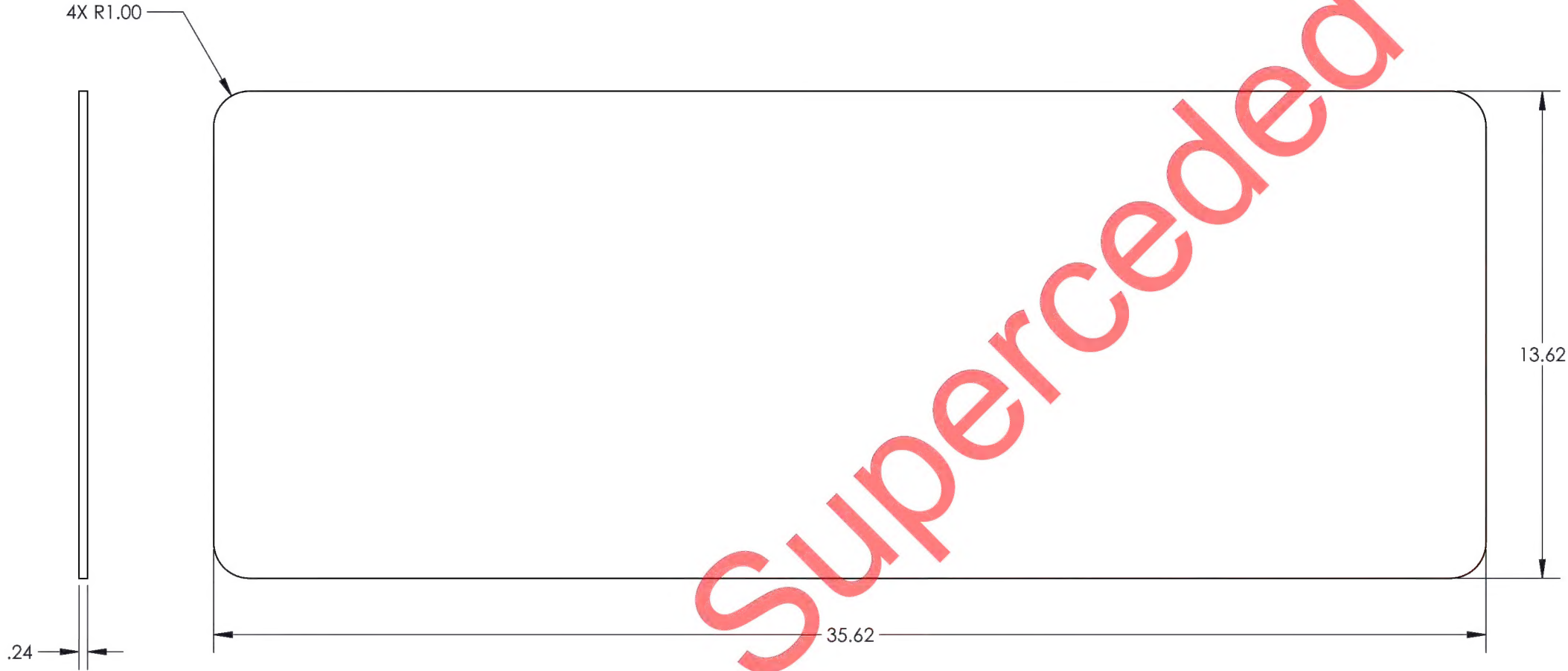
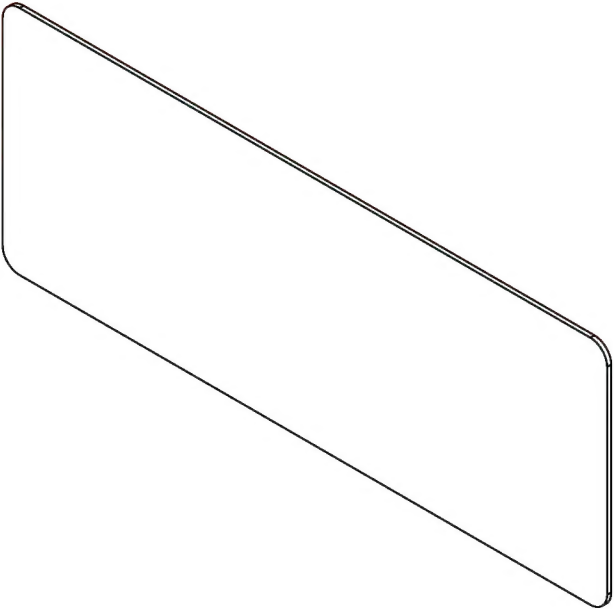


DART AEROSPACE		
TITLE LONG RANGER FIELD MAINTENANCE KIT		
DWG NO. RBT18543-77		REV 5
MAT'L Y-20 BLACK		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT		.XXX ± .005 FRACTIONS ± 1/8
FINISH		.XX ± .01 ANGLES ± .5°
SPEC		.X ± .1 SURFACES = 125/
DRAWN BY: CLOUGH		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED:		2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR:		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR:		USED ON MODEL
APPROVED: D Weil		206L
SCALE 1:4	DATE 8/17/2011	SHEET 3 OF 5

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
APPROVED				

SEE ATTACHED DEVIATION



UNDER REVIEW
URF 19-544 19.01.31 (MB)

- NOTES:
- 1. VENDOR TO ATTACH A 1in. WIDE BLACK RIBBON LIFTING HANDLE TO EACH END OF COROPLAST, LOOP TO BE LARGE ENOUGH TO ACCOMODATE LARGE HANDS AND FOLD ON TOP OF FOAM FOR STORAGE, -77 TOP TOOL CUSHION BE ATTACHED TO -79 .

-79
TOP CUSHION STIFFENER

DART AEROSPACE			
TITLE LONG RANGER FIELD MAINTENANCE KIT			
DWG NO. RBT18543-79			REV 5
MAT'L COROPLAST, BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/✓		
HEAT TREAT			
FINISH			
SPEC			
DRAWN BY:	CLOUGH	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
CHECKED:			
OPPS APPR:			
QA APPR:		USED ON MODEL	
APPROVED:	D Weil	206L	
SCALE	1:4	DATE	8/17/2011
SHEET 4 OF 5			

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-81 CH'D TO REFLECT NEW TOOLS ADDED AJ & AK.	2/29/2012	RJC	DW
5	15-0334	-81 CORRECTED RB23006783 TOOL DESCRIPTION WAS ADAPTER TURBINE NUT, LOWER IS UPPER, UPDATED CONTACT INFO TO DART AEROSPACE.	10/13/2015	RJC	JAG

SEE ATTACHED DEVIATION

RBT18543 TOOL KIT INCLUDES									
TOP SHELF					BOTTOM SHELF				
LOC	QTY.	TOOL No.	DESCRIPTION		LOC	QTY.	TOOL No.	DESCRIPTION	
A	1	RBT18538	SEAT FRAME SUPPORTS		S	2	EE-1-101	M/R SLING ASSY.	
B	1	RB2300COMB	POWER TURBINE CLEANING KIT		T	1	RBGTM12	M/R PILLOW BLOCK BOLT SOCKET	
C	1	RBPA003	T/R DRIVE SHAFT BRG. LUBE TOOL		U	1	RB6796941-14	STARTER SEAL GUIDE	
D	1	RBE-RDGS-15	SCALE TESTER		V	1	RBIR7028	BEARING INSTALL & REMOVE	
E	1	GOEX108	M/R PILLOW BLOCK NUT WRENCH		W	1	RBSC7028-P	S/P PITCH HORN BRG. CUTTER	
F	1	RB6798292-B	FUEL CONTROL WRENCH		X	1	RBST2812-P	S/P PITCH HORN BRG. SWAGING TOOL	
G	1	RBT18546	K-FLEX WRENCH		Y	1	RB DB3188L	TRANSMISSION DRAIN TOOL	
H	1	RBT18565	ENGINE BELL MOUTH RATCHET		Z	1	RB DB3225L	T/R G/B & FW UNT DRAIN TOOL	
I	1	RB23007638	FUEL NOZZLE WRENCH		AA	1	RB DB3225C	FREE WHEELING CLUTCH TOOL	
J	1	RBT18524	OIL SUMP STRAIGHTENER		AB	2	RBT18508	M/R MAST NUT SOCKET	
K	1	RBT400203	M/R TRIM TAB PROTRACTOR		AC	1	RBT18540	HELICOPTER LIFTING EYE	
L	1	RBT400202	M/R TRIM TAB BENDER		AD	1	RB6796941-201	STARTER PULLER ASSY.	
M	1	BCF-32	CROWSFOOT INB. HYD. FILTER		AE	1	RB6796941-203	SLIDE HAMMER ASSY.	
N	1	RB2300078	TRUNNION SPREADER		AF	1	RB6796941-18	STARTER SEAL INSTALLER	
O	1	RB23006782	ADAPTER TURBINE NUT, LOWER		AG	1	J7334	BLADE BOLT LATCH SOCKET	
P	1	RB23006783	ADAPTER TURBINE NUT, UPPER		AH	2	RBT18688	M/R RESTRAINT TOOL	
Q	1	RBT18551	SWASH PLATE SHIM BOLTS		AI	1	RBBP1425-101	INPUT DRIVE SHAFT TOOL KIT	
R	1	RBT18505	T/R CROSS HEAD PULLER		AJ	1	RBT112800	PTO SEAL INSTALL TOOL	
					AK	1	RBT18560	SEAL PULLER ENGINE GEARBOX	

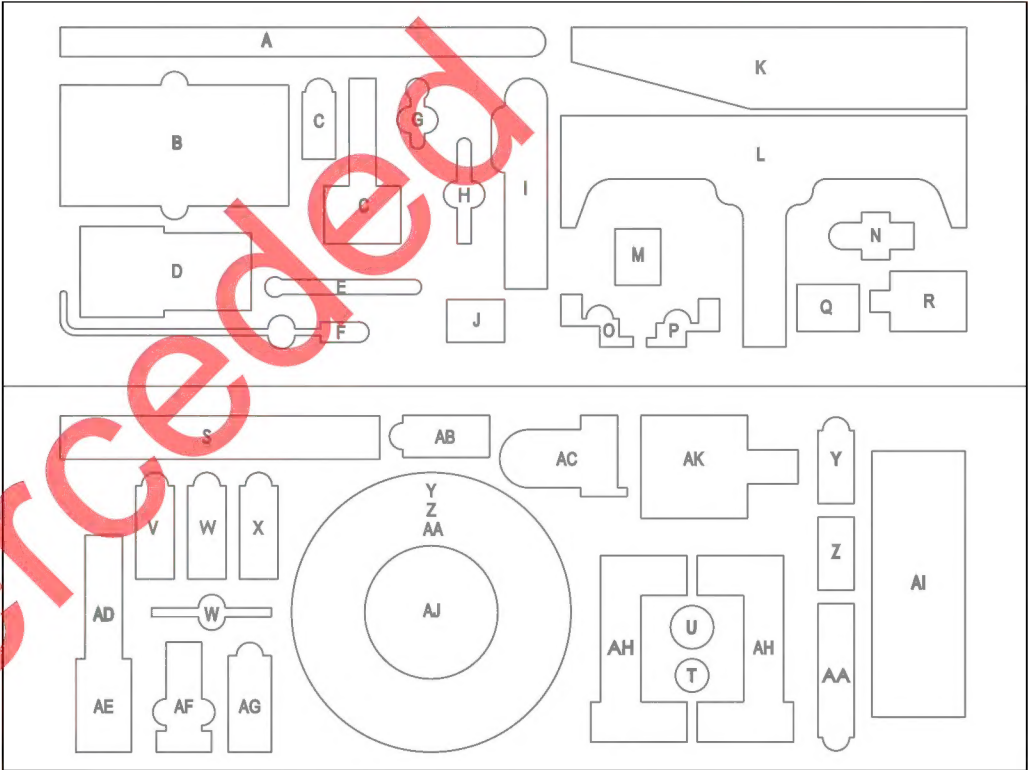


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e-mail: sales@dartaero.com

6.00

8.00

FRONT



BACK

UNDER REVIEW
URF 19-544 19.01.31 (MB)

NOTE:
CARD PAPER IS TO BE RED, PRINTED ON FRONT & BACK AS SHOWN, AND THEN PLASTIC LAMINATED. THE CARD WILL THEN BE ATTACHED TO A LANYARD WITH A GROMMET. THE OTHER END OF THE LANYARD WILL BE ATTACHED TO THE PELICAN CASE RIB ON LEFT END OF CASE.

-81
CONTENTS & LOCATION CARD

DART AEROSPACE			
TITLE LONG RANGER FIELD MAINTENANCE KIT			
DWG NO. RBT18543-81			REV 5
MAT'L LAMINATED CARD		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
HEAT		.XXX ± .005 FRACTIONS ± 1/8	
TREAT		.XX ± .01 ANGLES ±.5°	
FINISH		.X ± .1 SURFACES = 125✓	
SPEC		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
DRAWN BY: CLOUGH		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
CHECKED:		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
OPPS APPR:		USED ON MODEL	
QA APPR:		206L	
APPROVED: D Weil		DATE 8/17/2011	
SCALE 1:1.5		SHEET 5 OF 5	

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. RBT18543 Rev. G	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> </div> <div> Eng. (Non-AW) <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Water Jet <input type="checkbox"/> Supplier Quality <input type="checkbox"/> </div> </div>		
Date :	Sequence #:	QTY Affected :	MRB (QSI042) Oct 30, 2018	
Description Work Order Deviation		Disposition		Completed By
Kuri-Tech Hose (K010-0608) easily pulls out of Coupling (McMaster Carr 51495K116)		Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel into one end of the Kuri-Tech Hose until flush. Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable). This deviation is acceptable. The fit, form and function of the part will be as originally intended.		Lead hand / Supervisor
				QC / QA Coordinator
Root Cause		FAULT CATEGORY		
<div style="display: flex; flex-direction: column;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input checked="" type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div>		<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Crushing <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Mislabeled </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Incomplete/Unclear Instructions <input type="checkbox"/> Drill Holes <input type="checkbox"/> Fit/Function </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain Direction <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set/Set-up </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Outside Tolerance <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Misread </div> </div>		
Other/Details:				

UFR 19-544 19.01.31 (MB)